

AMENDMENTS TO THE SPECIFICATION

Please delete the third full paragraph on page 5 and replace with the following new paragraph:

(6) A process for producing the granular secondary particles of a lithium-manganese composite oxide as described in (1) above, characterized by comprising spray-drying a slurry prepared by dispersing a fine powder of a manganese oxide and a fine powder of lithium carbonate or by dispersing a fine powder of a manganese oxide, a fine powder of lithium carbonate, and a compound containing ~~the element M as described in (3) above one or more elements selected from Al, Co, Ni, Cr, Fe, and Mg~~ to thereby granulate the slurry and then calcining the granules at a temperature of from 700 to 900°C.

Please delete the first full paragraph on page 6 and replace with the following new Paragraph:

(8) A process for producing the granular secondary particles of a lithium-manganese composite oxide as described in (1) above, characterized by comprising spray-drying a slurry prepared by dispersing a fine powder of a manganese oxide, a lithium source, and an agent for open-void formation or by dispersing a fine powder of a manganese oxide, a fine powder of lithium carbonate, a compound containing ~~the element M as described in (3) above, one or more elements selected from Al, Co, Ni, Cr, Fe, and Mg~~ and an agent for open-void formation to thereby granulate the slurry and then calcining the granules at a temperature of from 700 to 900°C.

Please delete the third full paragraph on page six and replace with following new paragraph:

(10) The process for producing a ~~lithium-manganese composite oxide powder~~ granular secondary particles of a lithium-manganese composite oxide as described in (6) above, characterized in that a compound which is a compound of an element other than manganese, lithium, fluorine, and the M described in (3) above-~~v~~ and aluminum, cobalt, nickel, chromium, iron, and magnesium is not an agent for open-void formation is added as an additive to the slurry.

Please delete the second full paragraph on page 7 and replace with the following new paragraph:

(12) A non-aqueous electrolyte secondary battery characterized by employing ~~the lithium-manganese composite oxide powder~~ the granular secondary particles of a lithium-manganese composite oxide as described in (1) above as a positive active material.

Please delete the first full paragraph on page eight 8 and replace with the following new paragraph:

The invention has been achieved based on the finding that the size and amount of open voids present in granular secondary particles of a lithium-manganese composite oxide are factors which govern the discharge rate characteristics (the property corresponding to the high-rate charge/discharge characteristics in ~~JP-A-2002-75365~~ JP-A-2002-75365) of non-aqueous electrolyte secondary batteries employing this oxide as a positive active material. Namely, the granular secondary particles of a lithium-manganese composite oxide of the invention are characterized in that many micrometer-size open voids are present in network arrangement in the

particles, and that the size of these voids is in the range of from 0.5 to 3 μm in terms of average diameter and the amount thereof is in the range of from 3 to 20 vol.% on average based on the volume of the granules.

Please delete the third full paragraph on page 9 bridging page 10 with the following new paragraph:

Besides having many open voids, the granular secondary particles of the invention are preferably further characterized in that the granules have a specific surface area of from 0.2 to 1.0 m^2/g and an average diameter of from 5 to 30 μm and that the crystalline primary particles constituting the granules have an average diameter of from 0.5 to 4.0 μm . These values are specified preferred in order for the granules to bring about the maximum secondary-battery performances when used as a positive active material. For example, specific surface areas thereof exceeding 1.0 m^2/g or diameters of the crystalline primary particles smaller than 0.5 μm are undesirable because use of such granules results in considerable deterioration of charge/discharge capacity with cycling at a temperature of 50°C or higher. Specific surface areas thereof smaller than 0.2 m^2/g or diameters of the crystalline primary particles exceeding 4.0 μm are undesirable because use of such granules result in a decrease in discharge rate characteristics. Average diameters of the granular secondary particles outside the range of from 5 to 30 μm are undesirable from the standpoint of constituting a sheet electrode.

Please delete the first full paragraph on page 14 and replace with the following new paragraph:

A compound of an element other than manganese and lithium, e.g., a compound of aluminum, chromium, or the like, is often added for the purpose of heightening the performance of the lithium-manganese composite oxide of the invention as ~~a secondary positive electrode material~~ a positive active material. In the case where a compound of the element M is added, it is preferred to add it in the form of an oxide of the element or a precursor (hydroxide, etc.) for the oxide. With respect to methods for the addition thereof, it is desirable to add it to the slurry comprising a manganese oxide and lithium carbonate before the wet pulverization/mixing.

Please delete the first full paragraph on page 30 bridging page 31 and replace with the following new paragraph:

With respect to the samples of Examples 1 to 10, Comparative Examples 1 to 5, and Comparative Example 6, discharge rate characteristics were examined. Each sample powder was mixed with a conductive material/binder (acetylene black/Teflon resin) to obtain a ~~positive active material~~ positive-electrode material. Using lithium metal as a ~~negative active material~~ negative-electrode material and using an ethylene carbonate/dimethyl carbonate solution of LiPF₆ as a liquid electrolyte, coin batteries were fabricated. These batteries were examined for discharge rate at room temperature. Examples of the results of the measurement are shown in Fig. 4. Furthermore, the rate retention (proportion of discharge capacity at 5.5 C to discharge capacity at 0.3 C) and discharge capacity for each sample are shown in Table 5. It is apparent that the samples of Examples 1 to 10 are superior in discharge rate characteristics to the samples of Comparative Examples 1 to 5 and Comparative Example 6.

Please delete the first full paragraph on page 31 bridging page 32 with the following new paragraph:

The granular secondary particles of a lithium-manganese composite oxide of the invention show excellent discharge rate characteristics when used as the positive active material of a non-aqueous electrolyte secondary battery. The granular particles are hence useful especially as a ~~positive electrode material~~ positive active material for high-output lithium ion secondary batteries. Heightening the output of lithium ion secondary batteries is desired especially in application to hybrid electric cars, and the granular particles can be an effective material therefor. The granular particles can be utilized as a useful ~~positive electrode material~~ positive active material also in other applications of lithium ion secondary batteries, such as, e.g., power sources for purely electric cars, power storage, and portable appliances. The granular particles of the invention are highly worthy of industrial use.

Please